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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,924	12/08/2003	Kia Silverbrook	ZE006US	9668
24011	7590 10/04/2005		EXAMINER	
SILVERBRO	OOK RESEARCH PT	AHMED, SHAMIM		
BALMAIN,	2041		ART UNIT	PAPER NUMBER
AUSTRALIA			1765	<u> </u>

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-		Anntingsing Ma	A 12 A/ - 3				
Office Action Summary		Application No.	Applicant(s)				
		10/728,924	SILVERBROOK E	ET AL.			
		Examiner	Art Unit				
		Shamim Ahmed	1765				
Period fo	The MAILING DATE of this communica or Reply	tion appears on the cover shee	t with the correspondence ac	idress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status				•			
1)[🛛	Responsive to communication(s) filed of	on 08 December 2003	,				
2a)□		☐ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)⊠	Claim(s) 1-7 is/are pending in the appli	cation					
٠,١	4a) Of the above claim(s) is/are						
5)□	·						
	Claim(s) 1-7 is/are rejected.						
•	Claim(s) is/are objected to.						
8)□		n and/or election requirement.					
8) Claim(s) are subject to restriction and/or election requirement. Application Papers							
9) The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on <u>08 December 2003</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
44)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	ınder 35 U.S.C. § 119	•					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/112,806. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notic 3) Inforr Pape	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO- nation Disclosure Statement(s) (PTO-1449 or PTo r No(s)/Mail Date	-948) Paper I	ew Summary (PTO-413) No(s)/Mail Date of Informal Patent Application (PTo	O-152)			

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: At the beginning of the specification, the continuing data needs to be updated such as the US SN 10/303,291 filed on November 23 2002 is now US patent 6,672,708.

It is noted that the parent US application serial No.09/855,093 filed 05/14/2001, US patent 6,505,912 is a continuation of US serial No. 09/112,806, filed 7/10/1998, now US patent 6,247,790.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Regarding claim 1, lines 12-15, the phrase "etching both layers of thermally expandable material----- and define an ink ejection port" renders the claim indefinite because it is unclear how the ink ejection port is formed by etching both the layers of thermally expandable material on the heating circuit material?

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Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 6. Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2,5-6 of U.S. Patent No. 6,267,904. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in patent 6,267,904 broadly encompasses the instant invention as such as that both the invention claiming an etching process to form thermal actuator which could be bend upon heating to help ink ejection.
- 7. Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,331,258. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the patent '258 and the instant invention claim etching to form a thermal actuator, which could be, bend upon heating to help ink ejection.
- 8. Claims 1-2 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,3 of U.S. Patent No. 6,241,906.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention in patent '906 broadly encompasses the instant invention as such as that both the invention claiming an etching process to form thermal actuator which could be bend upon heating to help ink ejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bobrow et al (5,889,541) teach an ink jet printer including movable member made out of deformable metal layer; Ishii et al (5,804,083) disclose a micromachining process to form a ink jet print head and Miura et al (4,728,392) teach a conventional process for making ink jet print head.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (571) 272-1457. The examiner can normally be reached on M-Thu (7:00-5:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shamim Ahmed Primary Examiner Art Unit 1765

SA September 27, 2005